X−0.067 Y0.057 ; Move back to relative 0,0
M98 P2 ; Goto Subroutine 1 - 6th Coupling
; Go Back to Common Work Place
G90 ; Absolute Coordinate
F50 ; Feed Rate
X3.93 Y−4.6 ; Locate fixture and part
M25 H152 ; Open Door
M02 ; End of NC
; Coupling Weld Subroutine
O2 ; Welding Routine
F1 ; Feed Rate
G05Q1 ; Jog with Pause / Move to Upper Left Corner
G91 ; Incremental Coordinates
M8 ; Gas On
G4F.5 ; Dwell for 0.5 seconds
X0.010 Y−0.006 ; Offset from corner of coupling
M71 ; Laser Processing with Sync. feed
X0.015 ; Weld left bead=0.015:
M70 ; Stop laser processing
X0.095 Y0.006 ; Index to Right Upper Corner
G05Q1 ; Jog with Pause / Adjust to Upper Right Corner
X−0.010 Y−0.006 ; Offset from right corner of coupling
M71 ; Laser Processing with Sync. feed
X−0.015 ; Weld bead=0.015:
M70 ; Stop laser processing
M9 ; Gas off
M99 ; Return

10 mm ID stent

;10mm Stent Welding Program
M61 ;Laser Remote Control
; Welding Parameters
C101 Q10 ;FREQUENCY 10 HZ
C102 Q0.3 ;PULSE LENGTH 0.3ms
C108 Q300 ;Peak Power 200 W
C111 Q100 ; A-Scale 100
M51 ;MONITOR LASER OK
; Move to common work place
G90 ; Absolute Coordinate
F50 ; Feed Rate
X3.93 Y−4.6 ; Locate fixture and part
Z−2.6716 ; Adjust Focus
; Weld six Couplings
M26 H152 ; Reset Door
M98 P2 ; Goto Subroutine 1 - 1st Coupling
F4 ; Fast Feed for inter move
X−0.067 Y0.061 ; Move back to relative 0,0
M98 P2 ; Goto Subroutine 1 - 2nd Coupling
F4 ; Fast Feed for inter move
X−0.067 Y0.061 ; Move back to relative 0,0
M98 P2 ; Goto Subroutine 1 - 3rd Coupling
F4 ; Fast Feed for inter move
X−0.067 Y0.061 ; Move back to relative 0,0
M98 P2 ; Goto Subroutine 1 - 4th Coupling
F4 ; Fast Feed for inter move
X−0.067 Y0.061 ; Move back to relative 0,0
M98 P2 ; Goto Subroutine 1 - 5th Coupling
F4 ; Fast Feed for inter move
X−0.067 Y0.061 ; Move back to relative 0,0
M98 P2 ; Goto Subroutine 1 - 6th Coupling
; Go Back to Common Work Place
G90 ; Absolute Coordinate
F50 ; Feed Rate
X3.93 Y−4.6 ; Locate fixture and part
M25 H152 ; Open Door
M02 ; End of NC
; Coupling Weld Subroutine
O2 ; Welding Routine
F1 ; Feed Rate
G05Q1 ; Jog with Pause / Move to Upper Left Corner
G91 ; Incremental Coordinates
M8 ; Gas On
G4F.5 ; Dwell for 0.5 seconds
X0.010 Y−0.006 ; Offset from corner of coupling
M71 ; Laser Processing with Sync. feed
X0.015 ; Weld left bead=0.015:
M70 ; Stop laser processing
X0.095 Y0.006 ; Index to Right Upper Corner
G05Q1 ; Jog with Pause / Adjust to Upper Right Corner
X−0.010 Y−0.006 ; Offset from right corner of coupling
M71 ; Laser Processing with Sync. feed
X−0.015 ; Weld bead=0.015:
M70 ; Stop laser processing
M9 ; Gas off
M99 ; Return

It should be understood that the present methods and the devices they produce are not intended to be limited to the particular forms disclosed. Rather, they are to cover all modifications, equivalents, and alternatives falling within the scope of the claims. For example, while the devices illustrated in the figures have been woven from multiple strands, in other embodiments, the present methods could be applied to devices woven or otherwise created from only a single strand of material (such as a nitinol wire). Further, while stents have been shown in the figures, other devices suited for placement in an anatomical structure, such as filters and occluders, could have their free strand ends joined according to the present methods.

The claims are not to be interpreted as including means-plus- or step-plus-function limitations, unless such a limitation is explicitly recited in a given claim using the phrase(s) "means for" or "step for," respectively.

What is claimed is:

1. A self-expanding stent comprising:

a multiple number of strands each including a strand portion on both sides of a first strand bend, each of the strand portions having an end, the strand portions being woven, some of the strand portions including a second strand bend, pairs of said strand portion ends including two strand portion ends of two different strands or the same strand; and

a multiple number of joint assemblies, the number of joint assemblies equal to the number of strands, each said joint assembly comprising one of said pairs of said strand portion ends, the joint assemblies being spaced apart from each other around a circumference of the stent,

wherein at least one of said strand portions crosses over each joint assembly at a position radially outward from the joint assembly.

2. The stent of claim **1**, wherein each said joint assembly comprises a tubular member or a contoured strip.

3. The stent of claim **2**, wherein the tubular member or the contoured strip comprise a same material as the strands.

4. The stent of claim **2**, wherein the tubular member or the contoured strip is welded to one of the pairs of strand portion ends.

5. The stent of claim **1**, wherein the joint assemblies increase a radiopacity of the stent.

6. The stent of claim **1**, wherein the strand portion ends in each of the pairs of strand portion ends are spaced apart from each other.

7. The stent of claim **1**, wherein the strand portions in each of the pairs of strand portion ends are aligned end-to-end.